

ABSTRACT OF THE DISCLOSURE

A high strength cold rolled steel sheet consists essentially of 0.0040 to 0.01% C, 0.05% or less Si, 0.1 to 1.0% Mn, 0.01 to 0.05% P, 0.02% or less S, 0.01 to 0.1% sol.Al, 0.004% or less N, 0.01 to 0.14% Nb, optionally 0.05% or less Ti, optionally 0.05% or less B, by weight, and a balance of substantially Fe and inevitable impurities, and satisfying the following formulae (6) and (7):

$$(12/93) \times \text{Nb}^*/\text{C} \geq 1.2 \quad (6),$$

$$\text{TS} - 4050 \times \text{Ceq} \geq -0.75 \times \text{TS} + 380 \quad (7),$$

wherein $\text{Nb}^* = \text{Nb} - (93/14) \times \text{N}$, $\text{Ceq} = \text{C} + (1/50) \times \text{Si} + (1/25) \times \text{Mn} + (1/2) \times \text{P}$, wherein TS is the tensile strength in MPa, and C, Si, Mn, P, N and Nb denote the content in % by weight of carbon, silicon, manganese, phosphorus, nitrogen, and niobium, respectively. The high strength cold rolled steel sheet has excellent combined formability, resistance to embrittlement during secondary operation, formability at welded portions, and anti-burring performance, and has a desirable surface appearance and uniformity of material in a coil, and thus can be desirably used for automobile exterior panels.